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BEFORE THE

# Federal Communications Commission

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )

)  
)  
Amendment of Section 2.106 of the  
Commission's Rules to Allocate  
Spectrum at 2 GHz for Use  
by the Mobile-Satellite Service )

ET Docket No. 95-18

To: The Commission

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## **SUMMARY**

The ICO USA Service Group (“IUSG”) urges the Commission to recognize that the instant proceeding is critical to the viability of vigorous, new competition in the U.S. MSS marketplace, and that the policies the Commission adopts for the relocation of incumbent 2 GHz licensees will determine, in large measure, the extent to which 2 GHz MSS licensees enter that marketplace. The Commission can best promote rapid entry by these licensees by adopting policies that recognize and account for the unique needs of 2 GHz MSS.

The IUSG strongly supports the Commission’s decision to affirm its previous allocation of 70 MHz for MSS at 1990-2025 and 2165-2200 MHz. In addition, the IUSG strongly backs the Commission’s proposal to reallocate 85 MHz of spectrum for the BAS at 2025-2110. This allocation would provide the BAS with ample spectrum in which to operate over seven channels — the same number of channels currently available for BAS use.

The IUSG notes the Commission’s decision to apply to 2 GHz BAS incumbents the general relocation and cost recovery policies established in the Emerging Technologies proceeding, as modified by the Microwave Relocation/Cost-Sharing proceeding. If implemented, however, these policies must first be adapted to the unusual circumstances confronting MSS licensees. Specifically, the Commission should: (1) mandate relocation (in all its forms, including actual relocation, the replacement/modification of equipment, and simple retuning) only where harmful interference cannot be avoided; (2) provide that relocation can be accomplished without the wholesale removal of incumbents from existing frequency bands; and

(3) provide that MSS licensees be allowed to select the least expensive alternative means of such relocation.

Where sharing between 2 GHz BAS and MSS licensees is not possible, the IUSG urges that the Commission adopt the relocation measures previously proposed by the IUSG and ICO on an ex parte basis. If the Commission chooses not to do so, however, the IUSG proposes, as one of several possible alternatives, the transition plan detailed in these comments. That plan is designed to free, in measured steps, 2 GHz spectrum for MSS use while relocating BAS licensees to other bands only where absolutely necessary to avoid harmful interference. The IUSG believes the plan would reduce unnecessary monetary and logistical burdens on both incumbents and relocators.

To permit the identification of BAS incumbents that MSS licensees may have to relocate, the IUSG also urges the Commission to reverse its decision denying the IUSG's request for the mandatory submission of information on, among other things, BAS operations. The request, if adopted, would provide essential facts on the nature and extent of 2 GHz incumbent BAS facilities and operations, which in turn would allow the relocation process to go forward. To provide further certainty as to which BAS incumbents may be in need of relocation, the Commission should condition BAS licenses issued after the date of its FNPRM in this proceeding to require that the licensees pay for their own relocation expenses, and should also freeze BAS license applications and modifications of existing BAS licenses effective on the date of release of the MO&O in this proceeding.

The policies regarding relocation negotiations between BAS and MSS must be adapted to account for the particular scope and timing of MSS operations. Thus, MSS licensees should be

allowed to choose to negotiate individually or collectively with BAS licensees. In addition, the Commission should establish a one-year mandatory negotiation period, clarify its policy regarding good faith negotiations, and establish a sunset date for relocation payments that promotes the timely departure of incumbent licensees.

Regarding the FS, the IUSG strongly supports the Commission's affirmation of its earlier decision requiring MSS licensees to relocate only those primary FS incumbents in the 2165-2200 MHz band which receive harmful interference from MSS licensees. The IUSG also believes that many of the justifications for modifying the Emerging Technologies relocation and cost-sharing policies in the context of the BAS apply with equal force to the FS. Therefore, the Commission should freeze FS license applications and modifications of existing FS licenses effective on the date of the release of the MO&O, and require that primary FS incumbents provide necessary operational information. MSS licensees should also be permitted to select the lowest cost means of relocating primary FS incumbents.

Finally, the Commission is urged to adopt reimbursement policies that equitably distribute the cost of incumbent relocation among MSS licensees and that encourage the earliest possible provision of 2 GHz MSS services. To these ends, the IUSG believes that each MSS licensee should be required to assume relocation responsibility for incumbents only in the spectrum used by the MSS licensee. Moreover, assuming that MSS licensees will be authorized to construct their systems so as to operate across the entire licensed band, but ultimately will be assigned specific sub-bands within which to operate, an MSS licensee that clears spectrum should only be entitled to reimbursement to the extent that a later MSS entrant uses that same spectrum. If an MSS licensee clears spectrum but is then required to relocate to other spectrum



for any reason, it should be entitled to full reimbursement of all of its relocation costs, including the cost of capital, by the subsequent entrants using those frequencies.

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To: The Commission

**COMMENTS OF THE ICO USA SERVICE GROUP**

BT North America Inc., Hughes Telecommunications and Space Company, Telecomunicaciones de Mexico and TRW Inc. (together, the "ICO USA Service Group" or "IUSG"),<sup>1</sup> by their attorneys and pursuant to Sections 1.415 and 1.419 of the Commission's Rules,<sup>2</sup> hereby comment on the Commission's Third Notice of Proposed Rule Making in the above-captioned proceeding.<sup>3</sup>

The IUSG is comprised of established communications-oriented companies that are investors in ICO Services Limited ("ICO"), and which may also be providers of ICO mobile

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<sup>1</sup> BT North America Inc. represents the views of IUSG member British Telecommunications plc in the instant proceeding.

<sup>2</sup> 47 C.F.R. §§ 1.415 & 1.419.

<sup>3</sup> Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, Memorandum Opinion & Order and Third Notice of Proposed Rule Making and Order, ET Docket No. 95-18 (FCC 98-309) (released November 25, 1998) ("MO&O" or "Third NPRM," as appropriate).

satellite services ("MSS") in the United States.<sup>4</sup> The IUSG's comments herein seek to underscore the critical importance which this proceeding has for the MSS industry, in general, and the IUSG, in particular.

## I. INTRODUCTION

At stake in the instant proceeding is the viability of vigorous, new competition in the U.S. MSS marketplace. The policies that the Commission ultimately adopts with regard to the relocation of incumbent 2 GHz licensees — in order that new MSS operators may utilize 2 GHz spectrum — will determine not only the feasibility of 2 GHz MSS operations in the United States in the near future, but also whether multiple operators enter the 2 GHz MSS market in the longer term. Further, these policies will impact competition among satellite service providers in other bands in the United States and globally. Unless the FCC moves quickly to adopt policies on relocation<sup>5</sup> that effectively limit the associated costs to some reasonable level, many potential investors or service providers may find themselves unable to remain financially committed to these new satellite ventures. Such a result could deprive U.S. consumers of the services of

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<sup>4</sup> ICO filed with the Commission a Letter of Intent on September 26, 1997, indicating its intention to provide MSS in the U.S. market through one or more service partners and seeking access to spectrum in the 2 GHz frequency band.

<sup>5</sup> In the context of these comments, the term "relocation" is meant to include all forms of incumbent operational modifications necessary to permit 2 GHz MSS, including literal relocation out of existing frequency bands, the replacement or modification of some or all of an incumbent licensee's equipment such that continued operation in existing frequency bands is possible, and simple retuning.

numerous potential competitors, including the only foreign-authorized global system that is prepared to provide 2 GHz MSS in the near term.

In determining 2 GHz relocation policies in this proceeding, the Commission faces the following principal challenges:

- To act swiftly in devising rules and policies to accommodate the unique circumstances of 2 GHz MSS operations so that the U.S. public can benefit when the earliest 2 GHz MSS licensees begin to provide service worldwide;
- To implement its proposals in such a manner as to minimize the logistical and financial burden to all parties concerned; and
- To establish procedures for the accommodation of MSS operations that will serve as a model to the world for the opening of markets to foreign-licensed MSS systems — in keeping with the Commission's commitment to open the U.S. market for satellite service to foreign competition<sup>6</sup> — rather than an excuse for other nations to establish market entry barriers.<sup>7</sup>

While other 2 GHz MSS applicants in the current processing round have not begun construction of their systems, the ICO system — which is subject to authorization by the United Kingdom but, like the systems of existing U.S.-based competitors Iridium and Globalstar, is owned by a global consortium of U.S. and foreign-based investors — will be ready for

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<sup>6</sup> See Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States, Report and Order, 12 FCC Rcd 24094 (1997).

<sup>7</sup> Related to this challenge, Commissioner Ness has encouraged the Commission to consider the effect of its regulations on international satellite systems seeking to be licensed and to begin offering services globally. See Third NPRM, FCC 98-309, slip op. at 43 (Separate Statement of Commissioner Susan Ness).

deployment in the near term.<sup>8</sup> It is therefore almost certain that the IUSG and ICO will be the first entities to face the 2 GHz relocation process, and consequently have the most pressing need for the procedures that the Commission is considering in this and related proceedings regarding 2 GHz MSS matters. The IUSG urges the Commission to take swift action to make 2 GHz MSS service and competition a reality by expeditiously adopting 2 GHz relocation policies that recognize the unique needs of 2 GHz MSS licensees, establishing 2 GHz MSS eligibility requirements, and conditionally authorizing new MSS entrants by no later than the release of the Report and Order in this proceeding.<sup>9</sup>

The IUSG believes that the proposal previously submitted by ICO and the IUSG ex parte<sup>10</sup> would meet the challenges faced by the Commission in designing appropriate 2 GHz relocation policies. For reasons unspecified in the MO&O/Third NPRM, however, the Commission has apparently decided to reject that approach. In response to the Commission's request for "new ideas,"<sup>11</sup> the IUSG has developed the alternative recommendations summarized

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<sup>8</sup> ICO's scheduled launch of its first satellite is imminent, and ICO currently plans to commence service in the United States in the third quarter of the year 2000.

<sup>9</sup> In this last regard, the IUSG has previously made similar requests to the FCC. See Comments of the ICO USA Service Group ("IUSG Comments"), RM No. 9328, at 2-3, 6 (filed August 27, 1998).

<sup>10</sup> See Letter from C. Tritt, Counsel for ICO Global Communications, Morrison & Foerster, LLP, to M. Salas, Secretary, Federal Communications Commission (October 20, 1998) ("Ex Parte Proposal").

<sup>11</sup> Third NPRM, FCC 98-309, slip op. at 19 (¶ 41).

below and believes that their implementation could also enable the Commission to satisfy the challenges it faces in this proceeding.

## II. EXECUTIVE SUMMARY

● The IUSG strongly supports the Commission's decision to affirm its previous allocation of 70 MHz for MSS at 1990-2025 and 2165-2200 MHz, and recognizes its proposal to reallocate the 2110-2150 MHz band.<sup>12</sup> Additionally, the IUSG agrees with the Commission's proposal to reallocate 85 MHz of spectrum for the Broadcast Auxiliary Service ("BAS")<sup>13</sup> at 2025-2110 MHz.<sup>14</sup> Such allocation would provide sufficient spectrum for six 12 MHz channels and one 13 MHz channel that, with current technological developments, would be functionally equivalent to the earlier BAS 120 MHz allocation.<sup>15</sup> As discussed further below, the IUSG believes that BAS analog equipment can operate in the narrower channels.

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<sup>12</sup> See MO&O, FCC 98-309, slip op. at 5-6 (¶ 10); Third NPRM, FCC 98-309, slip op. at 15 (¶ 32).

<sup>13</sup> In these comments, "BAS" will collectively refer to the Broadcast Auxiliary Service, the Cable Television Relay Service ("CARS") and the Local Television Transmission Service ("LTTS").

<sup>14</sup> See Third NPRM, FCC 98-309, slip op. at 15 (¶ 32).

<sup>15</sup> See id.; see also COMSAT Corporation Ex Parte (filed March 18, 1998) (including a report entitled "Digital ENG Tests Using Noisecon Microwave Emulator Performed by COMSAT, Laboratories, Clarksburg, Maryland"); John B. Payne Ex Parte (filed February 17, 1998) (including a report entitled "Digital Video Microwave Systems for STL and ENG Applications & Test Results").

- The IUSG also is willing to work in accordance with the general relocation and cost recovery policies established by the Commission in its Emerging Technologies<sup>16</sup> proceedings, as modified by its Microwave Relocation/Cost-Sharing<sup>17</sup> rulings, with respect to the subject 2 GHz allocations.<sup>18</sup> These policies, however — developed in the context of individually licensed and geographically separate PCS frequency blocks — must be workable for a national and global MSS industry, as well as for the incumbent BAS and Fixed Service (“FS”) licensees subject to displacement.

- The IUSG believes, therefore, that the Commission needs to take a number of essential steps to modify its Emerging Technologies and Microwave Relocation/Cost-Sharing (together, “ET/Microwave”) policies so as to: (i) mandate relocation only where harmful interference cannot be avoided; (ii) provide that such relocation can be accomplished without wholesale

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<sup>16</sup> Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, *First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd 6886 (1992) (“Emerging Technologies First R&O and Third NPRM”); *Second Report and Order*, 8 FCC Rcd 6495 (1993); *Third Report and Order and Memorandum Opinion and Order*, 8 FCC Rcd 6589 (1993) (“Emerging Technologies Third R&O and MO&O”); *Memorandum Opinion and Order*, 9 FCC Rcd 1943 (1994); *Second Memorandum Opinion and Order*, 9 FCC Rcd 7797 (1994), *aff’d*, *Ass’n of Public Safety Communications Officials-International, Inc. v. FCC*, 76 F.3d 395 (D.C. Cir. 1996) (together, “Emerging Technologies”).

<sup>17</sup> Amendment to the Commission’s Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8825 (1996) (“Microwave Relocation/Cost-Sharing First R&O and FNPRM”); *Second Report and Order*, 12 FCC Rcd 2705 (1997) (together, “Microwave Relocation/Cost-Sharing”).

<sup>18</sup> See MO&O, FCC 98-309, slip op. at 7 (¶ 13), 9 (¶ 16); Third NPRM, FCC 98-309, slip op. at 19 (¶ 42), 20 (¶ 44).

removal from the existing frequency bands; and (iii) provide that the least expensive means of relocation will suffice.

- The IUSG strongly supports the Commission's determination to require accommodation only when primary FS incumbents receive harmful interference from 2 GHz MSS licensees.<sup>19</sup> Similarly, the Commission should require accommodation of incumbent BAS systems only when these facilities receive harmful interference from MSS licensees. The overarching principles of the Commission's relocation policies, as applied to the 2 GHz bands designated for use by the MSS, should be that when coexistence in the spectrum is possible without harmful interference to incumbent BAS/FS licensees — that is, where MSS licensees and 2 GHz incumbent licensees can share spectrum — no relocation of incumbent licensees should be necessary and no payment by MSS licensees for such relocation will be required.<sup>20</sup>

- In no case should the Commission require a nationwide, simultaneous changeover from the current BAS frequencies to deployment in the 2025-2110 MHz band, as such an approach: (i) is likely to be unnecessary for initial MSS operations in the 2 GHz band; (ii) is severely disruptive to incumbent BAS operators; (iii) imposes substantial costs and logistical obstacles on early MSS entrants; (iv) would surely delay significantly or prevent early operator entry into the MSS market and thus possibly postpone the provision of 2 GHz MSS service in the

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<sup>19</sup> See MO&O, FCC 98-309, slip op. at 13 (¶ 27).

<sup>20</sup> See Microwave Relocation/Cost Sharing First R&O and FNPRM, 11 FCC Rcd at 8845 (¶ 37) (relocation not required to move incumbent's entire system but only those links that receive interference; relocation of entire system would unfairly increase the relocater's monetary obligation).



United States indefinitely; and (v) may, in fact, simply be unworkable given the sheer quantity of equipment that would have to be available simultaneously.

- Instead, the IUSG herein urges the Commission to adopt a reasonable transition plan which, in measured steps, frees limited 2 GHz spectrum for MSS use while relocating a limited number of BAS licensees only when absolutely necessary to avoid harmful interference. Such a plan (see infra Section III.C.4 and Exhibit 1) would implement the Commission's ET/Microwave policies in a practical, economically sound manner — one which reduces unnecessary monetary and logistical burdens on incumbents and relocators alike.

- As to the licensing of BAS and FS systems and the reimbursement for relocation costs by MSS licensees, the IUSG recommends that, as sought in the recently filed Emergency Petition for Further Limited Reconsideration,<sup>21</sup> the license of any BAS applicant authorized after the release of the March 14, 1997 FNPRM<sup>22</sup> in this proceeding should be conditioned on relocation by the licensee at its own expense.<sup>23</sup> The FCC should also immediately impose a freeze on all applications for new BAS and FS licenses and modifications of existing licenses in the affected frequency bands, effective on the date of release of the MO&O in this proceeding. In addition:

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<sup>21</sup> Emergency Petition for Further Limited Reconsideration, ET Docket No. 95-18 (filed December 23, 1998).

<sup>22</sup> Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, First Report & Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388 (1997) ("First R&O" or "FNPRM," as appropriate).

<sup>23</sup> See Emergency Petition for Further Limited Reconsideration, ET Docket No. 95-18, at 8.

- As noted above, the relocation of primary incumbent licensees should be required only when absolutely necessary to avoid harmful interference;
- MSS licensees should be permitted to select the lowest cost alternative for relocation that meets the Commission's standards;
- no reimbursement should be required if the incumbent has retunable facilities that comply with the new spectrum plan or has purchased or set aside funds to purchase equipment that can operate in accordance with that plan; and
- payment to an incumbent licensee for relocation costs should be limited to the depreciated value of the equipment to be replaced.

● As to negotiations between MSS and incumbent licensees, the Commission must, as urged in the recently filed Petition for Expedited Reconsideration,<sup>24</sup> promptly reconsider and reverse its decision denying the Request for Mandatory Submission of Information filed with the Commission on July 30, 1998, as the information requested under that petition is necessary both for the Commission to adopt sound policies in the public interest and for MSS licensees to be able to determine with which BAS and FS licensees their operations may interfere and with whom negotiations may have to be conducted.<sup>25</sup> Where negotiations are necessary, the Commission should:

- permit MSS licensees to negotiate relocation issues with BAS/FS licensees individually, regarding issues that are unique to individual licensees, or collectively, with respect to those issues that affect incumbent licensees as a whole;

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<sup>24</sup> Petition for Expedited Reconsideration, ET Docket No. 95-18, RM-7927, PP-28 (filed December 23, 1998) ("Request Petition").

<sup>25</sup> See *id.* at 1-2, 11, 13-14.

- require that any relocation arrangements negotiated by MSS entrants to the 2 GHz bands be binding on any subsequent MSS entrants using the bands from which incumbent licensees were cleared; and
- commence a one-year mandatory negotiation period with the release of the Report and Order in this proceeding and add greater clarity to the good faith guidelines set forth in its rules.

The Commission should also establish a sunset date of January 1, 2005 on or after which MSS licensees should not be required to pay relocation expenses for any incumbent licensee relocated thereafter.

• With respect to the sharing of possible relocation costs among MSS licensees, the IUSG recommends that all licensed MSS operators using the same spectrum divide equally all of the costs incurred by any MSS licensee or licensees to relocate incumbent users of that spectrum. In addition, the FCC should provide:

- that an MSS licensee that is capable of sharing spectrum with incumbent licensees, and therefore has no need to relocate those incumbent's operations, should not be required to pay for the cost of any subsequent relocations made necessary by the later entry of an additional MSS licensee into the 2 GHz bands;
- for the establishment of a neutral, non-profit clearinghouse to administer the cost-sharing plan and determine the amount that subsequent MSS licensees must pay to an initial relocater; and
- for modifications to the Commission's cost-sharing formula in order to meet the unique requirements of MSS.

In the following sections, the IUSG explains all of these recommendations in greater detail.

**III. THE COMMISSION SHOULD IMPLEMENT ITS PROPOSED ALLOCATION OF 85 MHz TO THE BAS BY MEANS OF A MODIFIED VERSION OF ITS ET/MICROWAVE POLICIES REQUIRING MUTUAL ACCOMMODATION BY BAS AND MSS LICENSEES.**

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**A. The Commission's Decision to Allocate 70 MHz of the 2 GHz Spectrum for MSS and Its Proposal to Reallocate 40 MHz of the 2 GHz Spectrum Will Leave Ample Spectrum for BAS Operations.**

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The IUSG strongly supports the Commission's decision to affirm its previous allocation of 70 MHz for MSS at 1990-2025 and 2165-2200 MHz, and recognizes its proposal to reallocate the 2110-2150 MHz band.<sup>26</sup> As the Commission states in its MO&O, the record of this proceeding contains overwhelming evidence that MSS will need at least 70 MHz of spectrum to meet demand.<sup>27</sup> As for the reallocation of the 2110-2150 MHz band, that action is required by the 1997 Budget Act.<sup>28</sup>

These allocations leave BAS 2 GHz licensees with an ample 85 MHz in which to operate, and permit continued BAS operation on seven channels in the 2 GHz bands -- six 12 MHz channels and one 13 MHz channel. As the Commission indicates, studies and information that have become available since the adoption of the First R&O/FNPRM show that it is feasible to transmit FM analog BAS signals in channels as narrow as 12 MHz and digital BAS signals in

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<sup>26</sup> See MO&O, FCC 98-309, slip op. at 5-6 (¶ 10); Third NPRM, FCC 98-309, slip op. at 15 (¶ 32).

<sup>27</sup> See MO&O, FCC 98-309, slip op. at 6 (¶ 10).

<sup>28</sup> See Third NPRM, FCC 98-309, slip op. at 14 (¶ 30).

channels as narrow as 10 MHz.<sup>29</sup> Although the Commission notes in the Third NPRM that "the record suggests that existing analog BAS equipment would need to be modified extensively to operate within a 12 Megahertz channel or would need to be replaced with digital equipment,"<sup>30</sup> the IUSG submits that such modifications are eminently possible, and, indeed, advisable, as they would permit more efficient use of 2 GHz spectrum.<sup>31</sup>

The proposal to assign the 2110-2150 MHz band for other purposes would also simplify the process of relocating BAS and FS licensees to accommodate MSS 2 GHz operations. Under the allocation scheme set forth in the FNPRM, MSS licensees would have been required to pay not only to relocate BAS facilities into the 2110-2130 MHz band, but also to relocate FS operations from that band to other bands — a plainly inefficient use of resources. Moreover, an FS licensee that found its new facilities to be unsatisfactory would, in demanding restoration to its original facilities — an expensive process in and of itself — necessarily disrupt new BAS operations in the then-proposed 2110-2130 MHz band and necessitate expenditures to relocate those operations as well. The more straightforward allocations discussed in the Third NPRM create none of these unnecessary complications.

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<sup>29</sup> See id. at 15 (¶ 32).

<sup>30</sup> Id. at 17 (¶ 36).

<sup>31</sup> To the extent still deemed necessary following the review of the comments filed in this proceeding, the IUSG will submit further materials supporting these conclusions.

**B. The Commission Should Grant Co-primary Status to the Government Space Operations at 2025-2110 MHz, Demonstrating That Sharing Between Satellite Services and the BAS Is Possible.**

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In implementing its allocation proposal for the BAS at 2 GHz, the Commission should require mutual accommodation by BAS and MSS licensees of their respective operations. In this regard, the IUSG commends the Commission on its proposal to grant co-primary status to the Government space operation, Earth-exploration satellite, and space research services in the 2025-2110 MHz band.<sup>32</sup> More specifically, the IUSG applauds the example set by the Commission's proposal to require both BAS licensees and Government satellite systems to accommodate each other's operations, by effecting BAS operations consistent with the Commission's applicable coordination procedures, and by limiting Government use of the band to ensure that such use does not constrain deployment of BAS operations that conform with the Commission's rules in the 2025-2110 MHz band.<sup>33</sup>

As the Commission observes, the Government operations in question are authorized by four footnotes to the U.S. Table of Frequency Allocations.<sup>34</sup> Furthermore, as NTIA has indicated, the 2025-2110 MHz band is allocated internationally for these Government operations,

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<sup>32</sup> See Third NPRM, FCC 98-309, slip op. at 16 (¶ 34).

<sup>33</sup> See id.

<sup>34</sup> See id. at 16 (¶ 33) (citing 47 C.F.R. § 2.106 nn. US90, US111, US219, US222).

and the 1997 World Radiocommunication Conference modified international footnote S5.391 to protect such space services in the 2025-2110 MHz band.<sup>35</sup>

The Commission is correct in concluding that the success of the BAS and Government satellite systems in sharing this band for more than 30 years merits formal confirmation of the sharing arrangement.<sup>36</sup> The Commission's proposal to require that both BAS licensees and Government satellite systems take steps to accommodate each other's operations appears to be reasonable and equitable, in that it burdens both services equally for the sake of an arrangement that benefits both.

This example demonstrates that sharing between the BAS and satellite services is possible and can work well under certain circumstances. The Commission should apply the same general policy of mutual accommodation that it proposes for sharing between BAS and Government space operations to sharing arrangements between 2 GHz BAS incumbent licensees and MSS licensees. Thus, the Commission should not hesitate to require that 2 GHz BAS licensees take reasonable steps to accommodate new MSS operations.

**C. Appropriate Policies Must be Established to Account for the Unique Nature of MSS Operations and the Imminent Commencement of MSS Service.**

The IUSG notes the Commission's decision to affirm the choice in the First R&O/FNPRM to apply the relocation cost recovery policies established in its ET/Microwave

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<sup>35</sup> See *id.* at 16 (¶ 33).

<sup>36</sup> See *id.* at 16 (¶ 34).

proceedings to the subject 2 GHz allocations.<sup>37</sup> The IUSG recognizes that the policies established in the ET/Microwave proceedings may provide a reasonable framework for ensuring that 2 GHz BAS incumbent licensees are compensated fairly for any necessary relocation of their operations — provided that the following necessary steps are taken to minimize the cost and difficulty of relocation for all parties concerned, and to permit the commencement of 2 GHz operations in keeping with the deployment schedules of early entrants to the 2 GHz MSS market.

**1. The Commission Should Establish Eligibility Requirements and Grant Conditional Licenses to Qualified New Entrants.**

If U.S. consumers are to enjoy the benefits of competition that new entrants offer to the U.S. MSS marketplace, the Commission must not delay in constructing a regulatory framework to permit such new entrants to provide service in the United States. Even once it has done so, however, the Commission cannot reasonably expect that MSS licensees will be able to resolve the matters at issue in any necessary relocation negotiations or commit to make any relocation-related expenditures in keeping with the Commission's ET/Microwave policies until the Commission grants 2 GHz MSS licenses.

Therefore, and in connection with the ICO Petition for Expedited Rule Making to Establish Eligibility Requirements for the 2 GHz Mobile Satellite Service,<sup>38</sup> the Commission

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<sup>37</sup> See MO&O, FCC 98-309, slip op. at 7 (¶ 13); Third NPRM, FCC 98-309, slip op. at 19 (¶ 42), 20 (¶ 44).

<sup>38</sup> Petition for Expedited Rule Making to Establish Eligibility Requirements for the 2 GHz Mobile Satellite Service, RM No. 9328 (filed July 17, 1998) (“Expedited Rule Making Petition”).



should expeditiously adopt 2 GHz MSS eligibility requirements and conditionally authorize new entrants — i.e., entities such as ICO not already assigned spectrum to provide MSS in the United States — that meet those requirements by no later than the date of release of its forthcoming Report and Order in this proceeding. In adopting such eligibility requirements, the Commission must not permit 2 GHz MSS applicants<sup>39</sup> whose systems are still no more than concepts on paper — or that have yet to make significant use of MSS spectrum that they have already been granted — to complicate the process of relocating 2 GHz incumbent licensees unnecessarily and thereby delay the establishment of systems that are moving rapidly to launch and deploy satellite constellations.

**2. The Commission Should Not Require the Simultaneous Retuning or Replacement of All BAS Equipment.**

The Commission should abandon its proposal to require the simultaneous retuning or replacement of all BAS equipment nationwide on a date certain as part of its 2 GHz relocation plan.<sup>40</sup> A mandatory, nationwide, simultaneous changeover from the current deployment of BAS operations to deployment in the 2025-2110 MHz band would be unnecessarily disruptive to BAS operations. In addition, at least in the first several years of MSS operations, it appears highly unlikely that MSS licensees will need access to more than a portion of the 1990-2025 MHz band

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<sup>39</sup> In these comments, the IUSG uses the word "application" and "applicant" to refer both to U.S.-licensed systems' requests for assignment of spectrum and to letters of intent for non-U.S. licensed systems seeking access to 2 GHz spectrum in the United States, unless the context indicates otherwise.

<sup>40</sup> See Third NPRM, FCC 98-309, slip op. at 18 (¶ 39).

in order to serve the U.S. MSS marketplace. In many BAS markets, in fact, early MSS entrants may be able to share the current BAS bands with incumbent licensees in lieu of relocating BAS operations wholesale to different frequencies. More specifically, there may be many markets in which BAS licensees do not use current BAS Channels 1 and/or 2, thus permitting MSS licensees to provide service within the 1990-2025 MHz band simply by adjusting, modifying or replacing selected BAS equipment to permit BAS operation in more narrow channels (i.e., 10 or 12 MHz instead of 17 or 18 MHz).

Even if a BAS licensee currently uses Channel 1 and/or 2, it may be able to carry out the operations that it conducts in those bands in other assigned BAS channels that it is not now using. BAS licensees have never shown that they need all channels that they are currently authorized to use in all markets, and their operations on current Channels 1 and/or 2 may therefore be shifted in many markets to other channels at minimal expense so as to permit MSS use of these frequencies. Indeed, based on the information that the IUSG has at this time, it appears that incumbent 2 GHz BAS licensees rarely use all seven current BAS channels except in the largest U.S. markets.

Relocation of BAS licensees only in those markets and bands where relocation is necessary would serve to maintain the integrity of current BAS operations as 2 GHz MSS becomes a reality. While the Commission may be correct that BAS licensees employing the current BAS channelization plan would be unable to co-exist with those using the Commission's

new plan,<sup>41</sup> BAS abstention from the use of certain channels on a market-by-market basis — and the modification or replacement of the facilities of those incumbent licensees that still need to make use of those channels to permit operation in narrower channels than are presently used — should cause no such problems.

The IUSG also urges the Commission to recognize that a mandatory, nationwide, simultaneous changeover from the current deployment of BAS operations to deployment in the 2025-2110 MHz band would be unnecessarily wasteful of MSS operator resources. As the Commission accurately suspects, a simultaneous nationwide changeover would require an enormous up-front capital outlay by MSS operators.<sup>42</sup> Such an outlay presents its own logistical problems, as most MSS applicants are not expected to be ready to attempt service in the next five to seven years, and those that are will not need to use so much spectrum that all BAS licensees will need to exit the 1990-2025 MHz band simultaneously.

Any attempt to impose the cost of a nationwide changeover on the first MSS licensees to market — even if later reimbursement by subsequent MSS entrants is expected — would surely delay substantially or prevent early operator entry into the MSS market and postpone the provision of 2 GHz MSS service in the United States indefinitely. By permitting MSS relocation of 2 GHz BAS incumbent licensee operations on an as-needed basis, the Commission will reduce

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<sup>41</sup> See Third NPRM, FCC 98-309, slip op. at 17-18 (¶¶ 37-38).

<sup>42</sup> See id. at 18 (¶ 39).

the cost to MSS licensees of any necessary relocations and thereby leave MSS licensees with greater resources with which to provide competitive new services.<sup>43</sup>

As the Commission surmises, a simultaneous nationwide changeover also could force many BAS licensees to commit to digital technology and equipment — to the extent that the use of such technology is required — before it is necessary.<sup>44</sup> Under the more gradual relocation proposal set forth below, most BAS licensees would not be required to use digital technology and equipment to accommodate 2 GHz MSS operations for some time — and many might never be required to do so. BAS licensees would thereby be permitted to adopt digital technology in accordance with their actual needs. Thus, when such technology is needed in future years to relocate BAS operations, it will better serve BAS needs and require smaller purchasing outlays by MSS licensees — and, ultimately, their customers.

Even if the Commission's proposed simultaneous nationwide relocation of 2 GHz BAS operations did not present other problems, it is unlikely that a sufficient supply of equipment will be available simultaneously to permit MSS licensees to relocate all 2 GHz BAS operations from the 1990-2025 MHz band.<sup>45</sup> Based on inquiries by the IUSG with manufacturers of such equipment, it appears that the manufacture of the necessary equipment to permit a nationwide

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<sup>43</sup> As the Commission also correctly observed, increased relocation costs to relocators will be passed on to subscribers in the form of higher fees, and such higher fees would not serve the public interest. See Microwave Relocation/Cost-Sharing First R&O and FNPRM, 11 FCC Rcd at 8848 (¶ 43).

<sup>44</sup> See Third NPRM, FCC 98-309, slip op. at 18 (¶ 39).

<sup>45</sup> See id.

simultaneous transition cannot be accomplished.<sup>46</sup> Should the Commission mandate a nationwide changeover to the use of new BAS spectrum before sufficient equipment is available, major and unnecessary disruptions to BAS licensee operations would obviously result.

The mere manufacture of all equipment to permit such a transition would not suffice to permit the transition to take place in any event, as a complex and costly nationwide service effort would be required to ensure that the equipment is installed and operational by whatever deadline the Commission might establish. MSS licensees may be unable to relocate simultaneously 2 GHz BAS incumbent licensees in the absence of sufficient replacement equipment and human resources to install and test that equipment, as the Commission's relevant rules on involuntary relocation specify that incumbent licensees are not required to relocate until alternative facilities are available to them for a reasonable time to make adjustments, determine comparability and ensure a seamless handoff.<sup>47</sup>

The IUSG notes that the Commission's prior decisions do not support a simultaneous, nationwide changeover of BAS operations to conform with the new BAS 2 GHz allocation scheme. In the Microwave Relocation/Cost-Sharing proceeding, for example, the Commission held that PCS licensees are under no obligation to relocate an incumbent licensee's entire system at once, unless all of the links in the incumbent's system would be subject to interference by the

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<sup>46</sup> To the extent still deemed necessary following the review of the comments filed in this proceeding, the IUSG will submit materials supporting this conclusion.

<sup>47</sup> See 47 C.F.R § 101.75(c).

licensee.<sup>48</sup> Such an approach is all the more valid in the unusual circumstances of MSS licensees, which serve all or very large portions of the United States and would otherwise, unlike individual PCS licensees, be required under the Commission's ET/Microwave policies to relocate incumbent licensees nationwide in order to make use of several megahertz of spectrum. Given the Commission's stated commitment to the fundamental principles of its ET/Microwave policies,<sup>49</sup> the IUSG submits that the Commission must also adhere to those policies with regard to the timing of the transition to the new BAS allocation plan by permitting a more gradual transition to take place.

**3. The Commission Should Only Require MSS Licensees to Relocate Those BAS Incumbents That Receive Harmful Interference.**

In lieu of requiring a nationwide simultaneous changeover to its new BAS channelization plan, the Commission should clarify that, as it has held with regard to primary 2 GHz FS incumbent licensees,<sup>50</sup> MSS licensees will not be required to relocate any BAS incumbents with which they can successfully share spectrum without causing harmful interference as a result.<sup>51</sup> To require the relocation of BAS operations in the absence of any plausible prospect of harmful interference would unnecessarily disrupt current BAS operations. As indicated above, such

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<sup>48</sup> See Microwave Relocation/Cost-Sharing First R&O and FNPRM, 11 FCC Rcd at 8845 (¶ 37).

<sup>49</sup> See MO&O, FCC 98-309, slip op. at 7 (¶ 13); Third NPRM, FCC 98-309, slip op. at 19 (¶ 42), 20 (¶ 44).

<sup>50</sup> See MO&O, FCC 98-309, slip op. at 13-14 (¶¶ 27-28).

<sup>51</sup> See infra Section IV.A for a discussion of harmful interference and the relocation of primary FS incumbents.

unnecessary relocation also would waste valuable MSS licensee resources. By applying the same principles to sharing between MSS licensees and BAS licensees that it has applied to sharing between MSS licensees and primary FS licensees, the Commission will not only reduce the relocation costs to which MSS licensees may be subject (and thus spare MSS customers increased service charges) but will also spare many BAS licensees the need to undergo the onerous processes of negotiation and relocation.<sup>52</sup>

In this regard, the IUSG strongly supports the Commission's suggestion that it allow existing analog BAS equipment to continue to operate in a portion of the old/reallocated BAS spectrum until that portion of the spectrum is needed by MSS licensees.<sup>53</sup> More specifically, and as a corollary of the foregoing requested clarification, the Commission should state explicitly that MSS licensees need not relocate 2 GHz BAS incumbent licensees from the bands in which they currently operate to other bands so long as such incumbents can share their current bands with MSS licensees by operating in channels of reduced size (i.e., 10 or 12 MHz instead of 17 or 18 MHz).

By permitting 2 GHz incumbent licensees to continue to operate in their current bands unless and until out-of-band relocation is absolutely necessary, the Commission will once again

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<sup>52</sup> The Commission should also provide that MSS licensees will not be required to pay for the relocation of any incumbent licensees that must relocate their operations to comply with the outcome of any coordination process conducted pursuant to International Telecommunications Union regulations regarding cross-border interference between the United States and Canada or Mexico.

<sup>53</sup> See Third NPRM, FCC 98-309, slip op. at 18 (¶ 40).

minimize disruption of existing BAS operations. Because incumbent 2 GHz BAS licensees rarely use all seven current BAS channels except in the largest U.S. markets, it is likely that most BAS incumbents can simply forgo the use of certain channels and/or shift their operations from one existing channel to another in order to clear sufficient spectrum for MSS use.

Those 2 GHz BAS licensees that will be required to operate on more narrow BAS channels in order to avoid harmful interference from or to MSS operations may, in many cases, be able to do so by retuning rather than modifying or replacing their existing facilities. Any 2 GHz BAS licensee that needs new or modified facilities in order to accommodate MSS operations should obtain retuneable equipment so that any necessary future relocation to other bands can be made without expense or difficulty. Such a policy will also once again minimize relocation expenditures by MSS licensees and thereby reduce the cost of service to be borne, ultimately, by the user public.

**4. The Commission Should Adopt a Transition Plan That Provides for the Phased Relocation of BAS Incumbents, But Only Where Relocation is Absolutely Necessary to Avoid Harmful Interference.**

In response to the Commission's invitation for comment on alternatives to its proposal for a simultaneous nationwide changeover to the new BAS channelization scheme,<sup>54</sup> the IUSG proposes that the Commission adopt a transition plan that, in measured steps, frees 2 GHz spectrum for MSS use while relocating BAS licensees to other bands only where absolutely necessary to avoid harmful interference (see IUSG Suggested BAS Transition Plan attached as

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See id.



Exhibit 1). The following plan is one of a number of possible approaches which the IUSG is evaluating that could facilitate a rapid but orderly transition to MSS use of the 2 GHz bands.

In the first phase of the transition plan, to be implemented in accordance with the outcome of MSS/BAS negotiations as soon as agreements have been reached or involuntary relocation is warranted, such incumbent BAS operations as now exist in current BAS Channel 1 (1990-2008 MHz) would be shifted so as to operate in the 1990-2002 MHz band instead — thus freeing the 2002-2008 MHz band for global MSS use.<sup>55</sup> Little if any relocation of BAS operations would be required to clear this portion of BAS Channel 1 except perhaps in major metropolitan areas, where all seven BAS channels may be needed to meet demand.<sup>56</sup> No relocation of any BAS operations in the 2008-2025 MHz bands (*i.e.*, BAS Channel 2) would be necessary. As the 12 MHz-wide 1990-2002 MHz band can accommodate either 12 MHz analog or 10 MHz digital BAS operations, little actual replacement of BAS facilities would necessarily be required.<sup>57</sup>

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<sup>55</sup> Only those BAS licensees that are unable to transfer their operations in current Channel 1 to other existing BAS channels would be relocated as described. Thus, BAS licensees that currently use BAS Channel 1 but do not use one or more other existing BAS channels could employ such latter channels instead and thereby operate within a 17 MHz channel rather than a 12 MHz channel.

<sup>56</sup> Again, there is no evidence in the record that demonstrates that BAS licensees' needs are other than as stated. The lack of evidence on this matter is one reason why the IUSG's Request for Mandatory Submission of Information must be granted. See infra Section III.C.5.

<sup>57</sup> The IUSG concurs with the Commission's view that analog BAS operations can be accommodated in a 12 MHz channel. See Third NPRM, FCC 98-309, slip op. at 15 (¶ 32).

The second phase of the plan, commencing in the year 2002 or 2003, would involve the expansion of MSS operations to occupy the 2008-2015 MHz band, and the reduction of existing BAS Channel 2 (2008-2025 MHz) to 2015-2025 MHz. This phase of the proposed plan is designed to accommodate the operations of later arrivals and geostationary systems to the U.S. MSS marketplace. The second phase proposal assumes that digital technology will be the technology of choice for BAS licensees by 2002, and therefore reduces current BAS Channel 2 to a 10 MHz channel between 2015 and 2025 MHz. The combination of digital and analog technologies in adjacent 2 GHz BAS bands presents no cause for technical concern, as the IUSG has determined, following its own analysis, that digital and analog operations can operate in adjacent bands without mutual interference.<sup>58</sup>

In the third phase of the plan, MSS operations would expand to occupy the full 1990-2025 MHz band, and BAS Channels 1 and 2 would be moved to occupy the 2025-2036 MHz band and the 2036-2046 MHz band, respectively; BAS operations in current Channels 3 (2025-

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<sup>58</sup> This determination responds to the Commission's comment that "[t]here is little or no data in the record on whether analog and digital BAS signals could be transmitted on adjacent channels without mutual interference." *Id.* at 17 (¶ 36). The IUSG notes that analog and digital signals are often found on adjacent channels in the fixed service. Attached as Exhibit 2 hereto is an "Application Note" prepared by California Microwave/Microwave Radio Communications, indicating that analog and digital television signals can similarly share narrow adjacent spectral bands. Nucomm, Inc. began to ship a similar unit in 1998, and that unit is currently being used by CBS. *See* "Nucomm Introduces Dual Stream STL System for HDTV Requirements" (Press Release) (August 13, 1998); "CBS Corporation and Nucomm on the Forefront of HDTV Technology" (Press Release) (August 28, 1998) (both documents attached hereto as Exhibit 3).

2042 MHz), 4 (2042-2059 MHz) and 5 (2059-2076 MHz) would be converted to digital technology and relocated to the 2046-2056, 2056-2066 and 2066-2076 MHz bands, respectively. Such relocations would only take place at such time as sufficient MSS systems were ready to enter the 2 GHz band to warrant the changes involved. BAS Channel 1 would be reduced in this third phase to 11 MHz, thus probably requiring the conversion of facilities using that band to digital technology. The proposal deliberately preserves two analog BAS channels (6 and 7) in order to permit the continued operation of BAS facilities that may not be amenable to conversion to digital technology.

The IUSG reiterates that the foregoing proposal need only be employed if sharing between 2 GHz BAS licensees and MSS licensees is not possible. Should sharing not be possible, the IUSG believes that its proposal provides the Commission with a transition mechanism that will facilitate expeditious use of 2 GHz spectrum by MSS while retaining the integrity of BAS operations.<sup>59</sup>

**5. The Commission Must Reverse its Decision Denying the IUSG's Mandatory Information Request, as the Information Is Essential to the Relocation Process.**

In order to permit negotiations for relocations in the above-described transition plan — or in any transition plan — to begin, the Commission must enable MSS licensees to determine with which parties they need to negotiate. To this end, the Commission should promptly reconsider

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<sup>59</sup> See Third NPRM, FCC 98-309, slip op. at 19 (¶ 41).

and reverse its recent decision denying the Request for Mandatory Submission of Information<sup>60</sup> filed on July 30, 1998, as members of the IUSG have urged in the Request Petition.

The Request sought factual information on, among other things, the nature and extent of 2 GHz incumbent BAS licensee facilities and operations. Without the information sought in the Request, MSS licensees have no way of knowing with which incumbent 2 GHz BAS licensees they may or may not need to negotiate.<sup>61</sup> Grant of the Request, therefore, is decidedly in the public interest.<sup>62</sup>

**6. The Commission Must Condition New BAS Licenses to Require That Such Licensees Pay for Their Own Relocation Expenses and Must Freeze BAS License Applications.**

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The Commission should also take action immediately to condition all BAS licenses issued after the release of the March 14, 1997 FNPRM in this proceeding on the agreement by each party holding such a license to pay for its own relocation expenses if it is required to relocate as a result of MSS operations in the 2 GHz bands. By placing such a condition on post-FNPRM licenses, the Commission would effectively establish, for the first time, an upper limit

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<sup>60</sup> Request for Mandatory Submission of Information, ET Docket No. 95-18, RM-7927, PP-28 (filed July 30, 1998) ("Request").

<sup>61</sup> See Request Petition at 13.

<sup>62</sup> Although the Commission acknowledged the importance of the information sought in the Request by asking that BAS licensees include a portion of that information in their comments in this proceeding — a measure that, as explained in the Request Petition, is inadequate in any event — it made no such request of FS licensees. The Commission must require FS licensees, like BAS licensees, to file the information sought in the Request regarding their operations so that MSS licensees can identify those primary FS licensees with which they will need to negotiate, if any.

on the number of BAS licensees that MSS licensees may or may not be required to relocate. As all post-FNPRM 2 GHz BAS licensees may reasonably be held to have been on notice at the time they received their licenses that their operations would be subject to relocation, the addition of the requested condition on those licensees' licenses would prevent a windfall benefit that such licensees otherwise might derive from the relocation process.

When the Commission adopted its Emerging Technologies policies, it acknowledged that it "must provide emerging technology licensees with a stable environment in which to plan and implement new services."<sup>63</sup> The Commission's prior decisions thoroughly support the requested condition on post-FNPRM 2 GHz BAS licenses. The Commission itself inquired as to whether it should impose such a condition in its FNPRM.<sup>64</sup> In addition, the Commission has not hesitated to condition or freeze licenses when such action enhances its ability to transition incumbents and facilitate the entry of new licensees.<sup>65</sup> There also can be little doubt that the Commission has authority to condition authorizations retroactively where such action is appropriate.<sup>66</sup> Accordingly, and as requested in the ICO Emergency Petition, the Commission should condition

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<sup>63</sup> Emerging Technologies First R&O and Third NPRM, 7 FCC Rcd at 6891 (¶ 30).

<sup>64</sup> See FNPRM, 12 FCC Rcd at 7418 (¶ 71).

<sup>65</sup> See Amendment of the Commission's Rules with Regard to the 3650-3700 MHz Government Transfer Band, ET Docket No. 98-237 (FCC 98-337), slip op. at 11 (¶ 13) (released December 18, 1998); Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, 76 RR 2d. 843, 844 (¶ 2).

<sup>66</sup> See, e.g., International Settlement Rates, 12 FCC Rcd 19806, 19910 (¶ 229), 19911 (¶ 231) (1997) (conditioning existing Section 214 authorizations on compliance with newly adopted benchmark settlement rates).

all BAS licenses issued after March 14, 1997 on payment by recipients of such licenses of their own relocation costs.

In addition to imposing the condition on new BAS licenses discussed above, the Commission should immediately impose a freeze on all applications for new licenses and modifications of BAS licenses in the 1990-2025 MHz bands, effective on the date of release of the MO&O in this proceeding (i.e., November 25, 1998). The Commission explicitly sought comment on whether it should impose a freeze on new BAS license applications during the negotiation period in its FNPRM.<sup>67</sup> Although the Commission has not yet formally set a negotiation period, sporadic discussions between MSS and BAS licensees are in fact already taking place. Now that the Commission has issued a Third NPRM — in which it suggested that it might set the commencement date for voluntary negotiations as the date on which 2 GHz MSS applications were first accepted for filing<sup>68</sup> — all interested parties are plainly on notice that a freeze on new BAS 2 GHz applications could be imposed at any time, effective as early as July 22, 1997. In fact, the Commission could reasonably make such a freeze effective as of January 31, 1995, the date on which it released its Notice of Proposed Rule Making in the instant proceeding.<sup>69</sup> The Commission's practice of freezing new applications for incumbent users

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<sup>67</sup> See FNPRM, 12 FCC Rcd at 7418 (¶ 71).

<sup>68</sup> See Third NPRM, FCC 98-309, slip op. at 20 (¶ 44).

<sup>69</sup> Amendment of Section 2.106 of the Commission the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, Notice of Proposed Rulemaking, 10 FCC Rcd 3230 (1995) ("2 GHz NPRM").

whose use of the spectrum is not in compliance with an approved spectrum allocation plan is well-established.<sup>70</sup>

In order to provide MSS licensees with additional certainty as to which BAS operations may be in need of relocation, all renewals granted after the date on which any freeze is imposed on new 2 GHz BAS applications should be conditioned on secondary status as of January 1, 2000 (the date on which the allocation of 70 MHz to MSS becomes effective). To the same end, the Commission should grant no new BAS licenses in the 1990-2025 MHz bands starting with the date of issuance of the forthcoming Report and Order.

**7. MSS Licensees Should Be Allowed to Select the Lowest Cost Alternative in Meeting the Commission's Relocation Standards.**

In accordance with the principles underlying its ET/Microwave policies, the Commission should take steps to ensure that MSS licensees are required to pay only the just and reasonable cost of relocating any BAS licensees to new or narrower bands. Thus, MSS licensees should be permitted to select the lowest cost alternative for equipment replacement or retuning that meets the Commission's standards.

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<sup>70</sup> See generally Inter-Category Sharing of Private Mobile Radio Frequencies in the 806-821/851-866 MHz Bands, 10 FCC Rcd 7350, 7352-53 (¶ 7) (1995) (freezing new applications for inter-category sharing on all private mobile radio service frequencies in order to avoid compromising the successful resolution of the spectrum allocation issues raised in the associated rulemaking proceeding); Freeze on the Filing of Applications for New Licenses, Amendments, and Modifications in the 18.8-19.3 GHz Frequency Band, 11 FCC Rcd 22363 (¶ 1) (1996) (stating that new applications for new licenses, renewals, extensions, amendments, or modifications for terrestrial fixed services would not be accepted or processed).

The IUSG disagrees with the Commission's proposal to defer to the business decisions made by the affected parties during negotiations as to whether it is most economical and efficient to retune or replace existing BAS equipment.<sup>71</sup> As long as an MSS licensee provides modified or new facilities that meet the Commission's standards, it should be the MSS licensee's decision as to how to meet that standard most economically. As the Commission itself observed in its first Microwave Relocation/Cost-Sharing decision, its goal is to ensure that incumbents are no worse off, not to guarantee incumbents superior systems at the expense of relocators.<sup>72</sup>

**a. MSS Licensees Should Not Be Required to Provide  
Digital Replacement Equipment.**

As noted above, the IUSG agrees with the Commission that BAS licensees that are to be relocated to a channel of 12 MHz or greater may continue to operate with analog equipment.<sup>73</sup> As the Commission also observes, no other factors external to this proceeding require that relocated BAS licensees be provided with digital equipment. The Commission states that "[t]here is nothing in our DTV Proceeding which requires the transition of BAS to a digital format."<sup>74</sup> The Commission also notes that "a digital TV distribution system does not necessitate

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<sup>71</sup> See Third NPRM, FCC 98-309, slip op. at 17 (¶ 36).

<sup>72</sup> See Microwave Relocation/Cost-Sharing First R&O and FNPRM, 11 FCC Rcd at 8843 (¶ 32).

<sup>73</sup> See Third NPRM, FCC 98-309, slip op. at 15 (¶ 32).

<sup>74</sup> MO&O, FCC 98-309, slip op. at 9 (¶ 18).



digital contribution signals from BAS remote units to the studio."<sup>75</sup> Thus, as the Commission has apparently decided not to require all broadcasters to convert to digital ENG in the interest of spectrum efficiency as proposed by ICO and the IUSG,<sup>76</sup> MSS licensees should not be required to purchase new facilities for BAS incumbent licensees beyond what those licensees need to continue their present operations.

The IUSG supports the Commission's suggestion that criteria be established to gauge the acceptability of replacement BAS equipment.<sup>77</sup> Such standards would ensure that compressed bandwidth devices provide objectively comparable performance to existing analog equipment and assist all parties by preventing needless and time-consuming disputes.

**b. MSS Licensees Should Not Be Required to Replace  
Equipment That Can Instead Be Retuned.**

The Commission should not require that MSS licensees provide reimbursement to incumbent BAS licensees in any case in which an incumbent has facilities that can be retuned to comply with the FCC's new BAS channelization plan, or in which the incumbent has already purchased, or set aside funds to purchase, equipment that can operate in accordance with that plan. Any requirement that MSS licensees make such payments would plainly bestow an unwarranted financial gift on the incumbent 2 GHz licensees. The IUSG's proposal in this subsection accords with the Commission's already affirmed policy regarding MSS/FS sharing in

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<sup>75</sup> Id.

<sup>76</sup> See Ex Parte Proposal at 1.

<sup>77</sup> See Third NPRM, FCC 98-309, slip op. at 19 ( ¶ 43).

the absence of harmful interference,<sup>78</sup> in that no harmful interference can be held to occur where existing BAS equipment can be retuned to avoid it or new equipment that can operate in clear channels is already being obtained.

**c. MSS Licensees Should Only Have to Pay the Current Depreciated Value of Equipment.**

MSS licensees should not be required to provide reimbursement to a BAS licensee in a sum greater than the present value of the BAS equipment to be replaced, taking into account depreciation, plus any engineering and construction costs and FCC fees necessary to implement relocation. Similarly, when reimbursing a BAS licensee for its legitimate transaction costs (subject to a cap of two percent of the “hard costs” involved<sup>79</sup>), the amount MSS licensees should be required to pay should account for the depreciation of BAS equipment. The Commission asked in its FNPRM whether the value and age of BAS equipment should be taken into account in deciding appropriate costs in the case of involuntary relocation,<sup>80</sup> but did not reach any determination on this point in the Third NPRM. The Commission must acknowledge that ignoring the depreciation of incumbent licensees' equipment in judging the sum owed by MSS

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<sup>78</sup> See MO&O, FCC 98-309, slip op. at 13-14 (¶¶ 27-28).

<sup>79</sup> See 47 C.F.R. § 101.75(a)(1). “Hard costs” are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. See id. To avoid possible disputes over the amount of transaction costs due, the Commission should consider requiring — as an alternative to a payment subject to a two percent cap of the hard costs involved — the payment of a flat two percent of the hard costs. The flat two percent payment should also take into account the depreciated value of the BAS equipment to be replaced.

<sup>80</sup> See FNPRM, 12 FCC Rcd at 7417 (¶ 70).

licensees to replace that equipment confers an unfair financial benefit on incumbent licensees that is contrary to the Commission's own objectives.<sup>81</sup>

If, as the Commission states, the goal is merely to ensure that incumbents are "no worse off" as a result of relocation,<sup>82</sup> then failing to take into account the depreciated or "book" value of the equipment to be replaced does great violence to this precept. For, as any accountant will advise, the payment of funds in excess of the book value of equipment is a financial gain that is, in fact, a taxable receipt of profit. Incumbents are "no worse off" if they are compensated for the current value of their facilities — indeed, they already have realized the tax benefits of the depreciated portion of their equipment. There is no economic basis for providing them with a windfall in the way of additional funds with which to replace what they have already received.<sup>83</sup>

Reimbursement based on the depreciated value of BAS equipment will serve the interests of all parties to relocation negotiations by greatly simplifying the negotiation process. Indeed, a

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<sup>81</sup> The IUSG disagrees with the Commission's observation in Microwave Relocation/Cost-Sharing that compensating incumbents for depreciated value would not enable incumbents to construct comparable replacement systems. See Microwave Relocation/Cost-Sharing First R&O and FNPRM, 11 FCC Rcd at 8844 (¶ 34). The very meaning of depreciation is that new facility costs are "reserved" each year through tax benefit depreciation such that the owner has already recovered the full cost of the facility when it is fully depreciated. The owner is then in a position to fund new equipment with the tax benefits of his earlier write-offs.

<sup>82</sup> See Microwave Relocation/Cost-Sharing First R&O and FNPRM, 11 FCC Rcd at 8843 (¶ 32).

<sup>83</sup> In 1996, the Commission acknowledged that by 2005, much of the microwave equipment then in operation at 2 GHz is likely to be either fully amortized or in need of replacement. See id. at 8860 (¶ 67).

BAS incumbent licensee that presents a relocating MSS licensee with proof of the depreciated value of equipment requiring relocation may be able to obtain reimbursement without resort to any negotiations at all. The use of depreciated values will also aid in the resolution of any disputes that may arise as to whether a BAS incumbent licensee has received replacement facilities comparable to those it previously operated.

**8. The Policies Regarding Relocation Negotiations Must Be Adapted to Account for the Scope and Timing of MSS Operations.**

As the global or national nature of MSS and the constraints on MSS licensees are unique in the history of the Commission's application of its ET/Microwave policies, the Commission should adapt its policies regarding new entrant/incumbent relocation negotiations accordingly. Unlike the operations of previous new entrants whose services were local in nature, the operations of each MSS licensee at least potentially affect enormous numbers of incumbent licensees and therefore may require negotiations with very large numbers of those licensees. Nevertheless, and depending on their ability to share spectrum with 2 GHz BAS incumbent licensees and the nature of the appropriate sharing arrangements in each area, negotiations with such incumbents may necessarily deal with many issues that are unique to individual incumbents. The interests of MSS licensees, too, are diverse, and while some form of coordination is required among MSS licensees, flexibility must be built into the process to account for early MSS entry.

**a. MSS Licensees Should Be Able to Choose to Negotiate Individually or Collectively with BAS Licensees.**

With the above facts in mind, the IUSG proposes that MSS licensees be permitted to choose to negotiate relocation issues with BAS licensees individually, as regards issues that are

unique to individual BAS licensees, or collectively, with respect to those issues that affect BAS licensees as a whole.<sup>84</sup> Although it may be preferable for all licensed MSS operators to negotiate as a team with BAS licensees (given that those MSS operators using common spectrum will be dividing any relocation expenses amongst themselves), the IUSG believes that MSS licensees must be allowed to negotiate individually in cases where the operational time-frames of the various MSS systems differ significantly.

Where the use of an MSS negotiating team proves appropriate, that team should consist of an equal number of representatives from each 2 GHz MSS licensee that satisfies eligibility criteria for coordination, each representative being appointed by the licensee that it represents. Thus, if only two MSS operators satisfied the eligibility criteria for coordination initially, the negotiating team would consist only of those companies; should other applicants become eligible later, they would join the negotiating team at that time. All subsequent MSS entrants to the 2 GHz bands should be bound by the arrangements negotiated by prior entrants with 2 GHz incumbent licensees, to the extent that the subsequent entrants use the frequencies that were the subject of those negotiations.

**b. The Commission Should Establish a Mandatory Negotiation Schedule That Ends One Year After Issuance of its Report and Order.**

The Commission should establish voluntary and mandatory negotiation periods for non-public safety 2 GHz incumbent licensees so as to ensure that the mandatory period for

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<sup>84</sup> See Third NPRM, FCC 98-309, slip op. at 20 (¶ 43).

negotiations between MSS licensees and incumbent BAS licensees terminates one year after the issuance of the Commission's forthcoming Report and Order in this proceeding. The IUSG supports the Commission's proposal to establish one-year voluntary and one-year mandatory periods for non-public safety 2 GHz incumbent licensees.<sup>85</sup> One-year negotiation periods afford the parties adequate time in which to resolve the issues at stake while ensuring that the implementation of important new services will move forward expeditiously.

The IUSG also supports the Commission's suggestion that it begin the voluntary negotiation period on the date on which 2 GHz MSS applications were first accepted for filing (i.e., July 22, 1997),<sup>86</sup> as doing so would properly acknowledge the fact that sporadic talks between MSS and BAS licensees on the subject of 2 GHz relocations have already been underway for some time. This position is supported by representatives of BAS licensees; indeed, in joint comments on the FNPRM filed on June 23, 1997 by the Association for Maximum Service Television, Inc., the National Association of Broadcasters and the Radio Television News Directors Association, those parties urged the Commission to reject a multi-phase negotiation process and immediately commence a mandatory negotiation period so as to streamline the relocation process for all concerned parties.<sup>87</sup> As new entrant MSS operators such

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<sup>85</sup> See Third NPRM, FCC 98-309, slip op. at 20 (¶ 44).

<sup>86</sup> See id.

<sup>87</sup> See Joint Comments of the Association for Maximum Service Television, Inc., the National Association of Broadcasters and the Radio Television News Directors Association, ET Docket No. 95-18, at 9-10 (filed June 23, 1997). See also Reply Comments of the Association of America's Public Television Stations (continued...)

as ICO are eager to commence their provision of services to the U.S. consumer public as soon as possible, commencing mandatory negotiations with the release of the Report and Order would plainly satisfy all parties in interest.

**c. The Commission Should Clarify What Constitutes  
Good Faith Negotiations and How Such Negotiations  
Will Be Enforced.**

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The Commission should add greater clarity and force to the good faith guidelines set forth at 47 C.F.R. § 101.73, which it proposes to apply to the parties to MSS/BAS relocation negotiations.<sup>88</sup> As indicated in the Request Petition of the IUSG, the good faith guidelines will do little in their present state to safeguard the interests of negotiating parties.<sup>89</sup> As the parties to the Request Petition made clear in that pleading, the good faith guidelines will not ensure that sufficient information is available to MSS licensees with regard to BAS incumbent licensee operations to permit negotiations to move forward<sup>90</sup> — though the grant of the Request Petition and of the Request would likely provide MSS licensees with all the information that they require for that purpose.

In addition, it remains unclear what procedure the Commission would use to evaluate a showing of a violation of the good faith requirements, how much time would be required to

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<sup>87</sup>(...continued)

and the Public Broadcasting Service, ET Docket No. 95-18, at 3 (filed July 21, 1997) (supporting the proposal for a single, mandatory negotiation time period).

<sup>88</sup> See Third NPRM, FCC 98-309, slip op. at 21 (¶ 46).

<sup>89</sup> See Request Petition at 15-17.

<sup>90</sup> See id.

resolve any such dispute,<sup>91</sup> and what punishment would be imposed on any violator. In the absence of these specifics, the good faith guidelines are unlikely to inspire much faith in the negotiating parties.

**d. The Commission Should Establish a Sunset Date for Relocation Payments That Ensures the Timely Departure of Incumbent Licensees.**

Although only a few MSS licensees are expected to commence service in the 2 GHz bands in the very near future, in several years MSS demand for 2 GHz spectrum is likely to increase dramatically. It is therefore important that the Commission adopt a sunset date for relocation payments in the not-too-distant future, and in any event not a date as remote as the ten year date set forth in 47 C.F.R § 101.79.<sup>92</sup>

The IUSG urges the Commission to adopt a sunset date of roughly 10 years from the 1995 release of the initial NPRM in this proceeding,<sup>93</sup> which is still eight years after the start of the proposed voluntary negotiation period. This proposed time frame is well within the periods employed by the Commission in prior decisions; for example, private operational fixed microwave stations in the 12 GHz band received only five years to relocate their facilities before

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<sup>91</sup> For example, the Commission should consider use of an expedited special relief procedure similar to that used for other services, with truncated pleading periods that would give a definitive timetable for resolution.

<sup>92</sup> See Third NPRM, FCC 98-309, slip op. at 20-21 (¶ 45).

<sup>93</sup> See 2 GHz NPRM, 10 FCC Rcd at 3230.